

WHAT IS CLAIMED IS:

1. An apparatus for polishing a substrate on which a first layer and a second layer are formed, comprising:

a polishing table having a polishing surface,

a substrate carrier for holding a substrate and bringing the substrate into contact with said polishing surface, and

a water supply nozzle for providing water toward said polishing surface, and the substrate for cleaning said polishing surface, and toward the substrate after polishing the first layer and before polishing the second layer.

2. An apparatus claimed in claim 1, wherein said substrate carrier is positioned at an outer peripheral portion of said polishing surface when cleaning said polishing surface.

3. An apparatus for polishing a substrate on which a first layer and a second layer are formed, comprising:

a polishing table having a polishing surface,

a substrate carrier for holding a substrate and bringing the substrate into contact with said polishing surface, and

an actuator for altering a force acting to urge the surface of the substrate against the polishing surface during polishing of the first layer.

4. An apparatus claimed in claim 3, further comprising a water supply nozzle for providing water toward said polishing surface for cleaning said polishing surface after polishing the first layer and before polishing the second layer.

5. An apparatus claimed in claim 4, further comprising a thickness measurement device for determining an end point of polishing of said first layer, said thickness measurement device being positioned at an outer peripheral portion of said polishing table.

6. An apparatus claimed in claim 5, further comprising a liquid supply nozzle for supplying a first polishing liquid while polishing the first layer, and for supplying a second polishing liquid while polishing the second layer.

7. An apparatus claimed in claim 6, wherein said substrate carrier is positioned at an outer peripheral portion of said polishing surface after polishing the first layer and before polishing the second layer.

8. An apparatus for polishing a substrate on which a first layer and a second layer are formed, comprising:

a polishing table having a polishing surface,

a substrate carrier for holding a substrate and bringing the substrate into contact with said polishing surface,

a liquid supply nozzle for supplying a first polishing liquid while polishing the first layer, and for supplying a second polishing liquid while polishing the second layer,

an actuator for altering a force acting to urge the surface of the substrate against the polishing surface during polishing of the first layer,

a thickness measurement device for determining an end point of polishing of the first layer, said thickness measurement device being positioned at an outer peripheral portion of said polishing table, and

a water supply nozzle for providing water toward said polishing surface and the substrate for cleaning said polishing surface, and toward the substrate after polishing the first layer and before polishing the second layer.

9. An apparatus claimed in claim 5, wherein said water supply nozzle provides water for cleaning said polishing surface and the substrate after detecting the end point of polishing of the first layer.

10. An apparatus for polishing a substrate on which a first layer and a second layer are

formed, comprising:

a polishing table having a polishing surface,

a substrate carrier for holding a substrate and bringing the substrate into contact with said polishing surface,

a liquid supply nozzle for supplying a first polishing liquid while polishing the first layer and a second polishing liquid while polishing the second layer,

an actuator for altering the force acting to urge the surface of the substrate against the polishing surface during polishing of the first layer,

said substrate carrier is positioned at an outer peripheral portion of said polishing surface at least after polishing the first layer and before polishing the second layer, and

a water supply nozzle for providing water toward said polishing surface for cleaning said polishing surface after polishing the first layer and before polishing the second layer.

11. An apparatus for polishing substrates comprising:

a polishing table having a polishing surface; and

a transparent ring positioned outside and fixedly connected to an outer peripheral edge of the polishing surface, the transparent ring having a flat surface which is flush with the polishing surface of the polishing table.

12. An apparatus as set forth in claim 11, further comprising a layer thickness measuring device disposed under the transparent ring for measuring thickness of a surface layer of the substrate.

13. An apparatus as set forth in claim 12, further comprising a substrate carrier for holding the substrate, the substrate carrier being movable between a polishing position in which an entire area of a surface of a substrate to be polished is brought into contact with the polishing surface and a measurement position in which the surface of the substrate partly extends outwardly from the outer periphery of the polishing surface.

14. An apparatus for polishing substrates comprising:

a polishing table having a polishing surface; and
a stationary transparent member positioned outside, spaced away from and adjacent to an outer peripheral edge of the polishing surface, the stationary transparent member having a flat surface which is flush with the polishing surface of the polishing table.

15. An apparatus as set forth in claim 14, further comprising a layer thickness measuring device disposed under the stationary transparent member for measuring thickness of a surface layer of the substrate.

16. An apparatus as set forth in claim 15, further comprising a substrate carrier for holding the substrate, the substrate carrier being movable between a polishing position in which an entire area of a surface of a substrate to be polished is brought into contact with the polishing surface and a measurement position in which the surface of the substrate partly extends outwardly from the outer periphery of the polishing surface such that a portion of the substrate extending from the outer periphery of the polishing surface is placed on the stationary transparent member.